Author's response to reviews

Title: Predictors of smoking among Swedish adolescents

Authors:

Junia Joffer (junia.joffer@Ldalarna.se)
Gunilla Burell (gunilla.burell@pubcare.uu.se)
Erik Bergström (erik.bergstrom@pediatri.umu.se)
Hans Stenlund (hans.stenlund@epiph.umu.se)
Linda Sjörs (linda.sjors@Ldalarna.se)
Lars Jerdén (lars.jerden@Ldalarna.se)

Version: 2
Date: 3 December 2014

Author's response to reviews: see over
To Natalie Pafitis

Executive Editor, BMC Public Health

Dear Madam,

We have now made changes in the article in accordance to the suggestions from the reviewers. Below we give our responses to the comments and a new version of the article “Predictors of smoking among Swedish adolescents” has been uploaded. We are looking forward to your reply at your earliest convenience.

As specified before, we once again clarify that if accepted in BMC Public Health, the article will not be published elsewhere without the written consent of the editor of BMC Public Health and BioMed Central. There are no other financial or other relationships that might lead to a conflict of interest, except for what is written under acknowledgements. All authors comply with the Journal’s Conflict of Interest policy. The study was approved by the Research Ethics Committee of the Medical Faculty, Umeå University, Sweden.

All co-authors (Gunilla Burell, Erik Bergström, Hans Stenlund, Linda Sjörs and Lars Jerdén) have read the manuscript, are aware that this manuscript is being submitted to the Journal, and approve of publication.

Please address all correspondence to Junia Joffer, Center for Clinical Research Dalarna, Nissers väg 3, S-791 82 Falun, Sweden. E-mail: junia.joffer@Ltdalarna.se

Yours sincerely,

Junia Joffer
Response to reviewer - Severin Haug

Reviewers comment: “The authors do not mention the period, when the study was conducted. /.../ Are these data still up to date? Which changes in legislation since 2003 might affect the results presented?”
Response: The time period during which the study was performed (in 2003 and 2008) is now mentioned in the Method (Study population and procedures). A section regarding changes in the legislation and the development of smoking habits of adolescents since the last study has been added to the Discussion (last paragraph). Despite changes in legislation (smoking bans in restaurants, ban of advertising outside stores selling tobacco products and ban of cigarette sales in packets with fewer than 19 cigarettes) smoking habits in upper secondary school have been rather stable (CAN: Drug habits of pupils 2013) since the final data collection in 2008, hence we regard our data still being up to date.

Reviewers comment: “Smoking, the outcome variable, was defined as smoking every day, at least once per week or less than one time per week. This is a rather vague definition as adolescents smoking a puff once a month might also be classified as smokers. I would suggest to use a more conservative definition of smoking or to run separate analyses for occasional smokers (categories 2 and 3) and daily smokers (category 1).”
Response: We chose the definition of smoking (every day + less frequent smokers) based on our initial hypothesis - that in young adolescence, even a limited exposition to nicotine implies a risk for future smoking. Although we agree with the reviewer that a division of smokers into subgroups could have been more accurate, we find it problematic because of the low number of smokers in 7th grade. Such an analysis would further weaken the statistical power of the results. We added a section about this matter to the Discussion when addressing limitations.

Reviewers comment: “The multivariate regression model was created using the “enter” method considering all predictors simultaneously. However, multicollinearity and suppressor effects might have affected the results of this model. I would suggest to use more sophisticated methods for variable selection, e.g. a stepwise backward procedure followed by a stepwise forward procedure as described in “Purposeful selection of variables in logistic regression from Zoran Bursac, C Heath Gauss, David Keith Williams and David W Hosmer”.”
Response: As suggested the multivariate regression model has been changed from “enter” to “stepwise backward, followed by stepwise forward”. This is now mentioned in the Method (Statistics), and new data are presented in the Abstract and in Table 2. This new analysis resulted in almost the same model as before, although now, “smoking” (OR 2.80) was suggested to be included in the model. However, as smoking did not reach significance (sig. 0.061, (just barely by the CI 0.954-8.256)), we decided to exclude “smoking” from the final model.

Reviewers comment: “The discussion section is rather lengthy and could be written more concisely. Particularly the second paragraph on page 11 starting with “Modelling and social reinforcement...” and the second paragraph on page 12 starting with “School health education...” might be omitted or the authors should clarify how their connection to the results of the study.”
Response: The text has now been shortened and the section “School health education” has been omitted.
Response to reviewer – Ingeborg Lund

Reviewers comment: “I have some concerns regarding the discussion, particularly the middle part of it, which I find to be somewhat unstructured and unfocused.”
Response: We have now changed the Discussion, by clarifying, re-structuring, and reducing the text. More comments are given below where the reviewer specify suggestions for the Discussion.

Reviewers comment: “Abstract- Conclusion: The repetition of the results seems unnecessary as they are reported already in the abstract. Instead perhaps you should elaborate your three suggestions a little more (self-esteem, promotion of anti-smoking attitudes and avoid early snus initiation). For example also mention the importance of parents acting as role-models?”
Response: The repetition of the results from the univariable analysis has been omitted and an additional reflection regarding joint efforts involving parents, schools, youth associations, and legislating authorities has been made.

Reviewers comment: “Methods – study population and procedures, section beginning with “No parents refused…” and Figure 1: I am unsure of the value of including the information about waves 2 and 3. If waves 2 and 3 are not mentioned, perhaps you could also remove figure 1?”
Response: We discussed the suggestion of excluding wave 2 and 3 in the text and in Figure 1, however, as we also present results from these waves (frequency of smokers and snus users) in Figure 2 we regard this information as important to keep.

Reviewers comment: “Methods, Participants and non-responses: Same comment as before”.
Response: As we decided to keep the information on wave 2 and 3, we also kept the information in this section.

Reviewers comment: “Methods – study population and procedures, 3-5th line: The expression “educational level of the schools” a little confusing. The same applies to the statement “…covering both high and low parental educational levels…”. You should try to inform the reader more clearly that what is meant is the educational level of the parents.”
Response: The text “educational level of the schools” and “covering both high and low parental educational levels…” has been changed as suggested.

Reviewers comment: “Methods, Participants and non-responses, last sentence: You should say what these differences are”.
Response: We have now added an explanation of what the differences were when comparing background characteristics of participants at baseline and follow-up, compared to those lost to follow-up.

Reviewers comment: “Methods, Questionnaire, last sentence: Clarify how you could test reliability already when the questionnaire was under construction”.
Response: The reliability testing is now changed and described in more detail.

Reviewers comment: “Discussion, second paragraph, last sentence: I did not understand this sentence. Can you reformulate it?”.
Response: As both reviewers suggested to shorten and restructure the Discussion, this last sentence was one of those sections we choose to omit.
Reviewers comment: “Discussion, paragraph 3: Give the theory of planned behavior a less prominent place in the paragraph, as this is the first time it is mentioned in the paper. Also, move the limitations (don’t know if intentions have varied) to the section were you discuss limitations. I also suggest that you move the implication (actions during first six school-years) further back, i.e. that you insert a new paragraph towards the end of the discussion, were various implications are discussed”.
Response: The theory of planned behavior is now given a less prominent place. The limitation (if intentions have varied) has been moved to the limitation section. The implication (actions during first six school years) has, as suggested, been moved to a new section describing implications (paragraph eight).

Reviewers comment: “Discussion, paragraph 4: This paragraph concerns other research. Perhaps this could fit in an implication-section. As it is now I think it is too long, and not sufficiently tied to your findings”.
Response: The text (modeling and social reinforcement) has been shortened and moved to the new section of implications (paragraph eight).

Reviewers comment: “Discussion, paragraph 5: Although interesting, I think this paragraph is too long, particularly as you have no information on parents’ smoking. The last sentence is an implication, and should be moved to implications”.
Response: The text (teenage norms) has been shortened and reformulated, and the last sentence (acting as role models) has been omitted.

Reviewers comment: “Discussion, paragraph 6: Implications. Should be moved further back”.
Response: When restructuring and shortening the text we choose to omit this text (School health education…).

Reviewers comment: “Paragraph 7: You state that your results are not consistent with Norwegian increased risk of dual use results. However, it is not clear to me if your group of smokers are exclusive smokers or not. If your smoker group include many dual users, perhaps the results are not so inconsistent after all. Also, the sentence “thus in both studies snus facilitated smoking” is unclear, and seems at odds with what you wrote in the sentence before. Which “both studies”? Does this the sentence imply that there are less of an inconsistency than you said earlier?”.
Response: We have now changed the section about snus use and developed our interpretation of the relation to the Norwegian study of snus use (paragraph five).

Reviewers comment: “Methods, Participants and non-responses, first sentence: Instead of “…of these 649 participated in both the first and the fourth survey”, I suggest: “…of these 649 participated also in the fourth survey”.”.
Response: We made the change in accordance with the suggestion.

Reviewers comment: “Methods, questionnaire: Missing word in first sentence: focusing [on] self-rated health”.
Response: We made the change in accordance with the suggestion.

Reviewers comment: Results, 3rd sentence: Unnecessary “did” in the first half of this sentence.
Response: We made the change in accordance with the suggestion.
**Reviewers comment:** “Discussion, last half of second paragraph: typo: “relationship form” – should be “from”.”

**Response:** This word was omitted when restructuring the Discussion.

**Reviewers comment:** “Discussion, 5th paragraph, middle: “In this study we did not have excess.” – should be “access””.

**Response:** This word was omitted when restructuring the Discussion.

**Reviewers comment:** “Discussion, 6th paragraph, Is there a word missing in the sentence “Other stakeholders in this respect are..., mainly focusing [on] sports?”.

**Response:** This word was omitted when restructuring the Discussion.

Lastly, we would like to thank the reviewers for their comments, which have been very valuable to us.

Kind regards

Junia Joffer with co-authors